

IN THE UNITED STATES FATENT AND TRADEMARK OFFICE

In re application of:

Paul et al. (As Corrected)

Appl. No. 09/646,679 (U.S. National

Phase of PCT/GB99/00905)

Int'l Filing Date: March 22, 1999

For: Signal Transduction Protein Involved in Plant Dehiscence

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 0623.0890000/EKS/PSC

Information Disclosure Statement

Commissioner for Patents Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each of these documents is provided.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Paul et al. (As Corrected) Appl. No. 09/646,679 (U.S. National Phase of PCT/GB99/00905)

The Examiner's attention is directed to the following co-pending U.S. Patent Applications:

09/182,050, filed October 29, 1998,

09/528,188, filed March 17, 2000, and

09/528,249, filed March 17, 2000,

which are directed to related technical subject matter. Pursuant to 37 C.F.R. § 1.98 (a) (2), legible copies of these applications are provided herein. The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Applicants note that published PCT document WO 99/15680 (Document AL2) corresponds to U.S. Appl. No. 09/528,249 and WO 99/15681 (Document AM2) corresponds to U.S. Appl. No. 09/528,188. Each of these PCT documents is directed to subject matter that is related to the U.S. counterpart.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Eric K. Steffe

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ATTY. DOCKET NO. APPLICATION NO. 09/646,679 (U.S. 0623.0890000/EKS/PSC Nat'l Phase of PCT/GB99/00905) FORM PTO-1449 APPLICANT Paul et al. (As Corrected) INFORMATION DISCLOSURE STATEMENT **GROUP** INTERNATIONAL FILING DATE: March 22,1999 To Be Assigned U.S. PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER NAME CLASS SUB-CLASS FILING DATE INITIAL DATE 800 205 03/19/1996 05/25/1999 AA1 5,907,081 Isaac et al. 6,096,946 08/01/2000 800 290 09/30/1997 AB1 Roberts et al. AC ΑD ΑE ΑF AG ΑH ΑI LA ΑK FOREIGN PATENT DOCUMENTS FXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS TRANSLATION Yes AL1 WO 94/23043 10/13/1994 WIPO No Yes 08/03/1995 WIPO AM1 WO 95/20668 No Yes AN1 WO 96/30529 10/03/1996 WIPO No Yes WO 97/13865 04/17/1997 WIPO No AO1 Yes ΔP1 WO 99/13089 03/18/1999 WIPO No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Bleasby, A.J. $et\ al.$, "OWL - a non-redundant composite protein sequence database," Nucleic Acids Research 22:3574-3577, Oxford University Press (1994). AR 1 Christoffersen, R.E. and Laties, G.G., "Ethylene regulation of gene expression in carrots," Proc. AS 1 Natl. Acad. Sci. USA 79:4060-4063, The National Academy of Sciences of the USA (1982). Dean, C. et al., "Differential expression of the eight genes of the petunia ribulose bisphosphate ΑT 1 carboxylase small subunit multi-gene family," EMBO Journal 4:3055-3061, IRL Press Limited (1985). DATE CONSIDERED **EXAMINER** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through

citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 2 of 5

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	AS	<u>4</u>	Meakin, P.J. and Roberts, J.A., "Dehiscense of Fruit in Oilseed Rape (Brassica napus L.) II. The Role of Cell Wall Degrading Enzymes and Ethylene," Journal of Experimental Botany 41:1003-1011, Oxford University Press (1990).							
	AT	4	Needleman, S.B. and Wunsch, C.D., "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>Journal of Molecular Biology 48</i> :443-453, Academic Press, Inc. (1970).							
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